

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ralf WIDERA et al.

Conf. No.: 4000

Application No.: 10/507,179

Art Unit: 2454

Filed: February 25, 2005

Examiner: Wen-Tai Lin

For: METHOD FOR THE TRANSMISSION OF
MEASURED DATA FROM A MEASURING
COMPUTER TO A CONTROL COMPUTER IN
A MEASURING SYSTEM

APPELLANT'S BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants submit this Brief in accordance with 37 C.F.R. § 41.37 in support of their appeal from the Final Office Action, mailed September 4, 2009 by Wen Tai Lin, and the Advisory Action, mailed November 6, 2009, in the above-identified patent application.

In accordance with 37 C.F.R. §§ 41.31 and 41.37, this brief follows the December 4, 2009 filing of a Notice of Appeal and payment of the required fee. Appellants submit that this Appeal Brief is timely filed, and is accompanied by the appropriate fee. The filing of this Appeal Brief requires no extension of time fee. However, the Commissioner is hereby authorized to charge any unpaid fees deemed required in connection with this Appeal Brief, or to credit any overpayment, to Deposit Account No. 04-0100.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Deutsche Telekom AG. The inventors having assigned their rights in and to this application to Deutsche Telekom AG, such assignment having been duly recorded.

II. RELATED APPEALS AND INTERFERENCES

To appellants' knowledge, there are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 13-15, 18-23 and 29-31 are pending in the application.

This appeal is in respect of the rejection of claims 13-15, 18-23 and 29-31.

There are 12 claims pending in the application, *i.e.*, claims 13-15, 18-23 and 29-31. They are reproduced in the **Claims Appendix**. The current status of the application's claims is as follows:

1. Claims canceled: 1-12, 16-17, 24-28 and 32;
2. Claims withdrawn from consideration but not canceled: none;
3. Claims pending: 13-15, 18-23 and 29-31;
4. Claims allowed: none;
5. Claims rejected: 13-15, 18-23 and 29-31.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the mailing of the September 4, 2009 Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention provides a method and system for transmitting measured information from a measuring computer to a control computer of a measuring system, where the measuring computer and the control computer are interconnected via a telecommunications network. A method for transmitting measured information includes transmitting a plurality of measurement packets to the measuring computer so as to provide measured data including a plurality of respective one-way delay measurements, combining the measured data into characteristic values having a lower volume than the measured data, the characteristic values including at least one of a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput over a time interval, associating the characteristic values with a time of the combining, and transmitting the characteristic values from the measuring computer to the control computer. The system for measuring information includes a control computer and a measuring computer interconnected with the control computer via a telecommunications network, where the measuring computer is configured to transmit a plurality of measurement packets to the measuring computer so as to provide measured data including a plurality of respective one-way delay measurements, combine the measured data into characteristic values having a lower volume than the measured data, the characteristic values including at least

one of a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput over a time interval, associate the characteristic values with a time of the combining, and transmit the characteristic values to the control computer. (Specification, ¶¶ 2-4, 6, 13, 17, 21, 24-27, 30, 41-42, 48 and 51-52; Abstract; Fig. 1 item 10, 28, 32, 50; Fig. 2, table 66)

Independent method claim 13 is directed to “a method for transmitting measured information from a measuring computer to a control computer of a measuring system,” where the measuring computer and the control computer are interconnected via a telecommunications network (Specification, ¶ 3; Abstract; Fig. 1, item 10, 28, 32, 50), claim 13 recites the steps of “transmitting a plurality of measurement packets to the measuring computer so as to provide measured data including a plurality of respective one-way delay measurements,” (Specification, ¶¶ 2, 4, 6, 13, 24 and 42), “combining the measured data into characteristic values having a lower volume than the measured data,” (Specification, ¶¶ 17, 21, 30 and 48), “the characteristic values including at least one of a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput over a time interval,” (Specification, ¶¶ 21, 26 and 52; Fig. 2, table 66), “associating the characteristic values with a time of the combining,” (Specification, ¶¶ 27 and 51), and “transmitting the characteristic values from the measuring computer to the control computer.” (Specification, ¶¶ 17, 21 and 25).

Independent system claim 29 is directed to a measuring system that comprises “a control computer,” (Specification, ¶ 41; Fig. 1, item 50), and “a measuring computer interconnected with the control computer via a telecommunications network,” (Specification, ¶ 3; Abstract; Fig. 1 item 10, 28, 32, 50), the measuring computer is configured to: “transmit[] a plurality of measurement packets to the measuring computer so as to provide measured data including a plurality of respective one-way delay measurements,” (Specification, ¶¶ 2, 4, 6, 13, 24 and 42), “combin[e] the measured data into characteristic values having a lower volume than the measured data,” (Specification, ¶¶ 17, 21, 30 and 48), “the characteristic values including at least one of a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput over a time interval,” (Specification, ¶¶ 21, 26 and 52; Fig. 2, table 66), “associate the characteristic values with a time of the combining,” (Specification, ¶¶ 27 and 51), and “transmit the characteristic values to the control computer.” (Specification, ¶¶ 17, 21 and 25).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1) Whether claims 13-15, 18-23 and 29-31 can properly be rejected as obvious under 35 U.S.C. § 103(a) based on a combination of U.S. Patent No. 6,847,613 to Mimura et al. (“Mimura”) in view of the Examiner’s statement of what was known in the art at the time of invention.

VII. ARGUMENT

Grounds of Rejection No. 1: Obvious rejection of claims 13-15, 18-23 and 29-31 based on a combination of Mimura and the Examiner's Statement Of What Was Known in the Art at the Time of Invention

Mimura describes implementing monitoring of communication flows and collecting statistical data of a packet switched network. Mimura describes a meter 5 that observes incoming packets, and acquires/ retains statistical data on predetermined items for those incoming packets which meet conditions identified by a flow identifying unit 3. Mimura, column 6, lines 36-45, 59-65; Fig. 1. Under instruction by a MUX control 6, the statistical data is incorporated into the communication flow consisting of the packets to be delivered and sent as part of the flow. Mimura, column 7, lines 32-35.

Mimura describes that usage bandwidth 78 information regarding packet switch transmit bandwidth and timestamps 79 that can be acquired for each communication flow can be sent to a user. Mimura, column 14, lines 52-56.

The September 4, 2009 Final Office Action states that Mimura describes

that each set of bandwidth usage characteristics values (e.g., 78, Fig. 7) is also associated with three timestamps indicating the start, end and duration of time the measured raw packets are engage[d]. It is clear that the timestamp marking the end of each measured packet in a respective interval accurately describes a time of combining the characteristic values for the associated packets.

Detailed Action, page 6.

Independent claims 13 and 29 of the present application recite “combining the measured data into characteristic values having a lower volume than the measured data” and “associat[ing] the

characteristic values with a time of the combining.” It is respectfully submitted that Mimura fails to teach or suggest at least associating characteristic values with a time of their combining, as recited in independent claims 13 and 29. In contrast, Mimura merely describes that the packet switch’s transmit usage bandwidth 78 and timestamps 79, including a timestamp marking the end of each measured packet, can be sent to a user. Mimura, column 14, lines 52-56; Fig. 1. Contrary to the September 4, 2009 Final Office Action’s assertion that Mimura’s timestamp marking the end of each measured packet “accurately describes a time of combining the characteristic values for the associated packets,” (Detailed Action, page 6) it is respectfully submitted that, as noted above, Mimura in fact merely indicates that a timestamp marking the end of each measured packet can be sent to the user. Mimura nowhere teaches or suggests associating characteristic values with a time of the combining, as required by independent claims 13 and 29. Nor does the Examiner’s statement of what was known in the art at the time of the invention teach or suggest the above-recited features of independent claims 13 and 29 missing from Mimura. Therefore, a combination of Mimura and the Examiner’s statement, to the extent proper, could not render independent claims 13 and 29, nor their respective dependent claims, obvious.

Reconsideration and withdrawal of the rejection of claims 13-15, 18-23 and 29-31 under 35 U.S.C. § 103(a) as being unpatentable based on a combination of Mimura and the Examiner’s Statement is respectfully requested.

CONCLUSION

For all of the reasons set forth above, the rejections of claims 13-15, 18-23 and 29-31 should be reversed. Appellants respectfully request that the rejections be withdrawn, and the case passed to allowance.

Dated: February 2, 2010

Respectfully submitted,

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APPENDIXES

CLAIMS APPENDIX

The following is a copy of the claims involved in the appeal:

Claims 1-12 (Canceled)

Claim 13 (Previously Presented): A method for transmitting measured information from a measuring computer to a control computer of a measuring system, the measuring computer and the control computer being interconnected via a telecommunications network, the method comprising:

transmitting a plurality of measurement packets to the measuring computer so as to provide measured data including a plurality of respective one-way delay measurements;

combining the measured data into characteristic values having a lower volume than the measured data, the characteristic values including at least one of a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput over a time interval;

associating the characteristic values with a time of the combining; and

transmitting the characteristic values from the measuring computer to the control computer.

Claim 14 (Previously Presented): The method as recited in claim 13 wherein the telecommunications network includes at least one of an internet and an intranet.

Claim 15 (Previously Presented): The method as recited in claim 13 wherein the measured data includes a plurality of measurement parameters, and wherein the combining is performed according to the respective measurement parameters.

Claim 16-17 (Canceled)

Claim 18 (Previously Presented): The method as recited in claim 13 further comprising determining the time interval as a function of a measuring method.

Claim 19 (Previously Presented): The method as recited in claim 13 wherein the measuring system includes a second measuring computer and wherein measurement packets are transmitted between measuring computer and the second measuring computer.

Claim 20 (Previously Presented): The method as recited in claim 19 wherein the measurement packets include User Datagram Protocol measurement packets.

Claim 21 (Previously Presented): The method as recited in claim 19 wherein the characteristic values include a sum of all packets lost and a maximum of all successively occurring packet losses, and

further comprising determining the sum of all packets lost and the maximum of all successively occurring packet losses during a detection of measurement packet losses in a time interval.

Claim 22 (Previously Presented): The method as recited in claim 19 wherein the measured data includes unidirectional transmission characteristics.

Claim 23 (Previously Presented): The method as recited in claim 19 wherein the combining and transmitting are performed using the measuring computer, and wherein the measuring computer functions as a receiver and the second measuring computer functions as a sender.

Claim 24-28 (Cancelled)

Claim 29 (Previously Presented): A measuring system comprising:
a control computer; and

a measuring computer interconnected with the control computer via a telecommunications network, the measuring computer being configured to:

transmitting a plurality of measurement packets to the measuring computer so as to provide measured data including a plurality of respective one-way delay measurements;

combining the measured data into characteristic values having a lower volume than the measured data, the characteristic values including at least one of a mean one-way delay, a maximum one-way delay, and minimum one-way delay, a standard deviation of a one-way delay, a mean IP delay variation, a maximum IP delay variation, a standard deviation of an IP delay variation, a packet loss, and a packet throughput over a time interval;

associate the characteristic values with a time of the combining; and

transmit the characteristic values to the control computer.

Claim 30 (Previously Presented): The measuring system as recited in claim 29 wherein the telecommunications network includes at least one of an internet and an intranet.

Claim 31 (Previously Presented): The measuring system as recited in claim 29 wherein the measured data includes a plurality of measurement parameters, and wherein the combining is performed according to the respective measurement parameters.

Claim 32 (Canceled)

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EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings for this matter.